

What is claimed is:

1. A hub arrangement for mounting light pipe to receive light, comprising a light pipe hub for mounting at least one light pipe, with a plug-and-socket arrangement; the plug-and-socket arrangement including:
  - 5 a) a socket in the light pipe hub for receiving a plug;
  - b) a plug for mounting a light pipe end that is to receive light; a fore end of the plug being receivable within the socket; the plug having a channel for receiving the light pipe through an aft end of the plug.
- 10 2. The hub arrangement of Claim 1, wherein an interior channel in the plug for receiving the light pipe has an increasing diameter from the fore end to the aft end of the plug.
3. The hub arrangement of Claim 2, wherein the light pipe is held in the plug with the aid of glue.
4. The hub arrangement of Claim 3, wherein the glue is a cyanoacrylate-based glue or epoxy.
5. The hub arrangement of Claim 1, wherein the channel of the plug has a stop to locate the  
15 light pipe in a predetermined axial location within the plug.
6. The hub arrangement of Claim 2, wherein the light pipe is held in the plug with the aid of compression.
7. The hub arrangement of Claim 1, wherein the light pipe hub is made of plastic.
8. The hub arrangement of Claim 7, wherein the plug is made of metal.
- 20 9. The hub arrangement of Claim 1, wherein the plug and socket include a latch arrangement to releasably hold the plug in the socket.
10. The hub arrangement of Claim 9, wherein the plug has a flexible latch for being received within a walled cavity of the socket for locking the plug into the socket in axial predetermined location.
- 25 11. The hub arrangement of Claim 9, wherein the socket has a flexible latch for being received within a walled cavity of the plug for locking the socket to the plug in a predetermined relation.
12. The hub arrangement of Claim 1, wherein the aft end of the plug has a walled cavity for mounting a device for protecting the light pipe.

13. The hub arrangement of Claim 12, wherein the device is a strain-relief device for relieving strain on the light pipe.
14. The hub arrangement of Claim 12, wherein the device is a flexible metal conduit for receiving the light pipe.
- 5 15. The hub arrangement of Claim 14, wherein the metal conduit is directly mounted in the cavity.
16. The hub arrangement of Claim 12, wherein the device is a watertight covering to protect the light pipe.
17. The hub arrangement of Claim 12, wherein the device is fire-retardant material to protect the  
10 light pipe.
18. A hub arrangement for mounting light pipe to receive light, comprising:
- a) a rod hub for mounting at least one thermally isolating, light-collection rod for receiving light from a light source;
  - b) a light pipe hub for mounting at least one light pipe, with a plug-and-socket arrangement;  
15 the plug-and-socket arrangement including:
    - i) a socket in the light pipe hub for receiving a plug; and
    - ii) a plug for mounting a light pipe end that is to receive light; a fore end of the plug being receivable within the socket; the plug having a channel for receiving the light pipe through an aft end of the plug.
- 20 19. The hub arrangement of Claim 18, wherein the plug is arranged to position the light pipe in a predetermined axial location within the plug.
20. The hub arrangement of Claim 18, wherein the thermally isolating rod is refractory.
21. The hub arrangement of Claim 18, wherein the rod hub and the light pipe hub are so arranged as to cause the confronting faces of the light pipe end and the light-collection rod  
25 to be sufficiently close to each other that faces wet themselves to each other so as to form singular interface between the two faces.
22. The hub arrangement of Claim 18, wherein inter-fitting surfaces of the socket and plug are shaped to prevent insertion of the plug unless the confronting faces of the light-collection rod and the light pipe are so arranged that the light-carrying portion of the light pipe receives  
30 substantially all the light emitted by the rod.

23. The hub arrangement of Claim 22, wherein the socket can receive a plug holding a light pipe with a light-carrying portion of a first size and a plug holding a light pipe with a light-carrying portion of a larger size.
24. The hub arrangement of Claim 18, wherein the rod hub includes a plate with an aperture for receiving the rod and mounting the rod to the hub.
25. The hub arrangement of Claim 24, wherein the plate has a groove contoured for receiving an O-ring for being compressed against the rod when the plate is secured into the rod hub.
26. The hub arrangement of Claim 24, wherein the plate is removable from the rod hub.
27. The hub arrangement of Claim 24, wherein the rod hub includes a compressible gasket for holding the rod.
28. The hub arrangement of Claim 18, wherein an interior channel in the plug for receiving the light pipe has an increasing diameter from the fore end to the aft end of the plug.
29. The hub arrangement of Claim 18, wherein the light pipe hub is made of plastic.
30. The hub arrangement of Claim 29, wherein the plug is made of metal.
31. The hub arrangement of Claim 18, wherein the plug and socket include a latch arrangement to releasably hold the plug in the socket.
32. The hub arrangement of Claim 18, wherein the aft end of the plug has a walled cavity for mounting a device for protecting the light pipe.
33. The hub arrangement of Claim 32, wherein the device is a strain-relief device for relieving strain on the light pipe.
34. The hub arrangement of Claim 32, wherein the device is a flexible metal conduit for receiving the light pipe.
35. A hub arrangement for mounting light pipe to receive light, comprising:
- a) a rod hub for mounting at least one thermally isolating, light-collection rod for receiving light from a light source; the rod hub including a plate with an aperture for receiving the rod and mounting the rod to the hub; and the plate having a groove contoured for receiving an O-ring for being compressed against the rod when the plate is secured into the rod hub;
  - b) a light pipe hub made of plastic for mounting at least one light pipe, with a plug-and-socket arrangement; the plug-and-socket arrangement including:

- i) a socket in the light pipe hub for receiving a plug; and
- ii) a plug for mounting a light pipe end that is to receive light; a fore end of the plug being receivable within the socket; the plug having a channel for receiving the light pipe through an aft end of the plug; the plug including an interior channel for receiving the light pipe, the channel having an increasing diameter from the fore end to the aft end of the plug; the channel having a stop to locate the light pipe in a predetermined axial location within the plug; and an aft end of the plug having a generally annular cavity for connecting to a strain-relief device.

36. The arrangement of claim 35, wherein the number of rods and light pipes is three or four.